"Old Latin"

— Computer Modern like font with "long s" —

Taro Terashita *

Version 1.00 (18. Apr. 2010)

Contents

T	Introduction
2	Lists of "Old Latin"
	2.1 Parameter files
	2.2 Common body files
	2.3 IATEX files
	2.4 Required files of Computer Modern
3	My Environment
4	How to install "Old Latin"
5	How to use "Old Latin"

1 Introduction

As hobby and research, I copy from old German text on real paper into digital LATEX file. There are already fine fonts for the purpose: yfrak, ygoth and yswab. These fonts have not only fine graphic but also academic correctness. You learn how to typeset in ancient days if you master them. There is a package oldgerm for such old German fonts. I used be with it when the idea of "Old Latin Font" occurred, while I use the package yfonts with german today.

Even in such happy time with these old German fonts, I find also some words with Latin font in original old book. In such case, normal Latin font is available, of course. Computer Modern is default of TEX and suitable enough, but there is a problem with modern Latin fonts, i. e. "long s" (in German, "langes s"): It looks like "f" but lacks right half of side bar.

There is also Latin font with "long s" in LATEX Font Catalogue, like "Day Roman S". But I love Computer Modern because of its shape and its philosophy. That is more than a design, that is a system. And it looked not so difficult to modify long s from "f"; just bite off a little bit short side bar, wouldn't it?

^{*}Ehime University, Japan. Email: tarotera @ agr.ehime-u.ac.jp

Additionally, I found some ligatures with "t" in old text, for example "(long)st" in "Forst" or "ct" in "Inspector", and tried to design them, too.

Actually, it was not as easy as I've thought. The problems occur not direct by designing new fonts but mainly by setting new rules of ligature. However, I did somehow.

You see not only practical "long s" in Roman as result, but also some fun fonts in Bold, Dunhil, Slanted, Sans Serif, Typewriter Text, which are generated through one common body, roman.mf. (You see then why the font in Italic was not redesigned. The font is generated through textit.mf.)

I wish you enjoying this variation named "Old Latin". Your corrections and comments are always welcome. Especially, I let all combinations of ligatures allowed WITHOUT any knowledge in Germanistik or in history of Typesetting. So, some ligatures may be not allowed or not possible in real text. I am happy to hear about such information.

2 Lists of "Old Latin"

2.1 Parameter files

olb10.mf olbx5.mf olbx6.mf olbx7.mf olbx8.mf olbx9.mf olbx10.mf olbx12.mf olbxs110.mf oldunh10.mf olff10.mf olfib8.mf olr5.mf olr6.mf olr7.mf olr8.mf olr9.mf olr10.mf olr10s.mf olr12.mf olr17.mf ols18.mf ols19.mf ols110.mf ols112.mf ols1t10.mf olss8.mf olss9.mf olss10.mf olss12.mf olss17.mf olssbx10.mf olssdc10.mf olssi8.mf olssi9.mf olssi10.mf olssi12.mf olssi17.mf olssq8.mf olssq18.mf oltt8.mf oltt9.mf oltt10.mf oltt12.mf olvtt10.mf

2.2 Common body files

oroman.mf oromanl.mf oromlig.mf oromligs.mf

2.3 LaTeX files

Your IATEX and dvi-viewer generates tfm and pk files with these files: test_alphabet.tex test_ol_all.tex test_ol_bf.tex test_ol_rm.tex test_ol_sl.tex test_ol_ss.tex test_ol_t.tex

And also sample files in same names with suffix .pdf

2.4 Required files of Computer Modern

These are not inclusive in this contribution. There must be somewhere in your T_FX system:

romanu.mf greeku.mf romand.mf romanp.mf romspl.mf romspu.mf punct.mf
accent.mf comlig.mf romsub.mf

3 My Environment

You have all files above and it depends on you how cook them. As a example, I will show you how I did. I worked with following softwares:

- Microsoft Windows XP, Version 5.1.2600
- pdfTeX, Version 3.1415926-1.40.10 (Web2C 2009)
- dviout for Windows, Version 3.18.1
- dvipdfmx, Version 20090919

I hope you understand or infer what the following explanation means, even if you use Mac OS or UNIX.

4 How to install "Old Latin"

- Check if all above listed files (ol*.mf, orom*.mf and test_*.tex) are in your current work directory.
- Tip the command latex test_ol_all, then latex stops because there is no tfm files. Just tip r for run further, then latex generates tfm files automatically. Try latex again after that, then it generates dvi file smoothly with fresh generated tfm files.
- Now you have two ways to display:
 - dviout for windows → open file → sellect test_ol_all.dvi. At first, dviout will stop because there is no pk files. Just click the icon "Retry" (it can be several times), then dviout generates pk files automatically. After that you have to close dviout once and copy the fresh generated pk files from current work directory into the directory which your dviout can refer. Then let dviout with test_ol_all again and it shows you the result.
 - Tip command dvipdfmx test_ol_all and it generates pk files automatically. See the result pdf file with your viewer, for example Adobe Reader.
- If everything goes well, try other test_ol_*.tex files to generate all rest tfm and pk files. Then move mf, tfm and pk files into each correct directories. For example, I created new directories (A hint to decide the place: Near by the directory named gothic):

/texmf/fonts/source/public/oldlatin for mf files,
/texmf/fonts/tfm/oldlatin for tfm files and
/texmf/fonts/pk/cx/public/oldlatin for pk files.

5 How to use "Old Latin"

See the inside of test_ol_*.tex files. That is shortest way to use the fonts. You declare:

\font\olr=olr10 scaled 1000

and write:

\olr Forstwissenschaft

then the word "Forstwissenschaft" will be written with "Old Latin" font.

You cannot change the size or shape with the commands like \large or \textsl. You have to declare every fonts for each size and shape. The rough comparison is: 5 point is for \tiny, 7 point for \scriptsize, 8 point for \footnotesize, 9 point for \small, 10 point for \normalsize, 12 point for \large and 17 point for \LARGE. And olr is for Roman, olbf for Boldface, olsl for Slanted (differs from "italic"), olss for Sans Serif, oltt for Typewriting Text.

If you know NFSS2 well, then you can solve better (regrettably, I couldn't). See the fntguide.pdf (or .tex) in your TEX system, or the book "The LATEX Companion".

For "Sperrsatz" (this is a German word), which has larger space between letters and was used in order to emphasize, you can make new font with changing parameter letter_fit# in your favorite ol*.mf. I add olr10s.mf as an example. The result shows you an easygoing atmosphere especially by ligatured letters, but I do not recommend you this way. Use package soul.sty, that is much better.

If you want to call a letter direct with code number, then get the code number at first. Each program for letter in mf file begins with "cmchar" and short explanation. In the next line you will find "beginchar(oct"213"..." for example. Here the number "213" is what you want. Write \symbol{'213} in tex file, and LATEX generates the letter.